Issue 124 September 2014

KNOTTING MATTERS

The Magazine of the International Guild of Knot Tyers

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Front Cover ***A superb knotty collection from the fertile mind and hands of John Richings - such talent as this is hard to find!***

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EXECUTIVE COMMITTEE REPORT

At our meeting in September, we attempted to try a new system of communication, which unfortunately was unsuccessful. After a frustrating hour, we reverted to Skype for that day. We continue to search and test for the perfect solution, and we have confidence we will [find it], to enable our 14 members in 4 countries, to be able to see and speak with each other.

We have been discussing the idea of a "business " card, on the lines of those used by the French Branch, to hand out. We wish to have 1 design to be used in all countries, with space for each country's individual language and details. We intend having a final design ready to present to the AGM in 2015.

In March/ April next year [2015], a replica of the French frigate " Hermione" will sail from La Rochelle in France to Boston in the USA. The Frigate was in service in the 1800s, and in 1780 sailed by the Marquis de La Fayette to join the American rebels fighting for their independence. The plan is to have a French member make an appropriate gift to go aboard the " Hermione", which we hope will be met by USA members in Boston, and exchanged with a gift made by an American member.

Work is still in progress regarding a new web-site.

Being Editor of KM is a difficult job. In an effort to ease the load, we hope to appoint 2 assistants. One will obtain Branch reports, and the other will obtain articles. Lindsey will remain as Managing Editor to put it all together.

Our next meeting is in November
Sheila Pearson, Executive Committee Secretary

Letters to The Editor
The Things You Say!!

Dear Lindsey,

I've been reading and writing about the life and works of the Reverend Charles L. Dodgson – Oxford mathematics don, noted portrait photographer and Victorian children's author (pen name: Lewis Carroll) – for several years. I recently found, in a 1970 edition of his nonsense poem *The Hunting of the Snark*, published by Heinemann: London, that the illustrator Helen Oxenbury had drawn a sheepshank. This appears at the foot of a page in which the Butcher attempts to prove to his friend the Beaver by a complicated calculation that 2+1 = 3. Why that particular knot? Why any knot? Can some KM reader(s) tell us?

Geoffrey Budworth

Dear Lindsey,

Following the utterly memorable meeting on board Queen Mary, my wife Lynn and I went on to do the usual tourist things like visits to museums and galleries in Los Angeles and Denver. As a thematic bibliophile I also dragged Lynn into a couple of libraries in those cities in search of books on rope and knots. As I have done in several other libraries I asked at the desk the whereabouts of the 623 category which in my experience is the normal location for these books. 623, under the Dewey classification system, is on subjects relating to boats, and as we all know every knotter is presumed to have been a sailor or a Boy Scout. At the desk on the Science & Technical floor of the LA institution I made my enquiry and was courteously escorted to the appropriate aisle a couple of hundred metres (or yards) away or so it seemed. Result of a quick inspection was that there were no books on the particular subect on the shelves there. The librarian asked for an author so I naturally offered Ashley. Back at the ....

Back at the desk a quick enquiry of the computer revealed the tome was located under 677. This classification is for fibres, and to my mind a more logical place to locate books of this particular nature. I found the same logic applied in the Denver library.

On return to Tasmania, I raised the subject in our local library, and so intrigued the duty librarian that she immediately carried out a computer search using the key words "Knots and Splices, All". The results were 623, 799, 677 and 910. The latter relates to navigation, so I assume that is due to the use of the term to indicate a ship's speed. Books on knots and ropework are only located under 623 here, with the rest relating to fishing, knitting and similar crafts.

Being just a little biased and believing that rope (generic term for everything fom thread to hawsers) should be treated as a basic subject in the classification, I would opine that all libraries should reclassify their holding and give the the subject of this letter a specific Dewey classification. Being a realist, I will from now on search the shelves under the numbers given above.

Frank Brown

Dear Everyone
As many of you know, I was presented with a splendid gift of engraved glasses at the "Blue Lias" meeting this weekend as a presidential retirement present from the Guild. Thank you so very much for a real 'bolt out of the blue'. As you may imagine they will be over-worked by Jackie and I as we (frequently!) toast all our good friends in IGKT.
Happy knotting!
Colin

Dr Colin Byfleet
IGKT
Secretary to the Trustees

Lifetime Membership

by
Colin Grundy

Lifetime Membership

At the 2007 Guild AGM (Fareham, UK), life membership was granted by the meeting to those founding members of the IGKT who were still with us, as recognition of their part played in the the Guild over some 25 years. Sadly, there were far fewer of them than the number who gathered on RMS Discovery in London.

In KM 122, Barry Mault suggested that lifetime membership should be given to people who have achieved some fame in knot tying without already being members of the IGKT. Owen K Nuttall, a long term member of the Guild, and contributor to KM, chose to challenge this in KM 123.

Free membership is granted to Junior members until the age of 18 years in a bid to encourage younger members to take up knot tying. I don't know how many young people take up this offer, or how much it cost the Guild. Membership has been given in the past to certain people outside the UK who have been unable to afford the cost of the subscription, but this has been by way of an anonymous sponsorship from an existing member. In the past, the Council have pondered long and hard on the inequality of the cost of membership to people outside the UK, without being able to come up with a solution that satisfies all.

By giving lifetime membership to people who have chosen not to join the IGKT, who benefits? Why have they not joined, do they feel they need us? Looking at some of the names suggested, perhaps it is because KM is, and has been, an English language publication. It would be nice to be International in our publications, but KM is edited by volunteers who may not have access to translation services, and which other languages would you choose – French, Spanish, Mandarin? There would be a cost implication to this. Again I can recall the anguish faced by the Council in the past when an increase in the subscription was needed!

If these people are granted lifetime membership, will they contribute in a positive way to the aims of the Guild, or will it just be a feather in the cap of the IGKT? Those founding members of the Guild were granted Lifetime membership for their contribution to the IGKT, that is something special, let's keep it that way.

Colin Grundy

In Memoriam

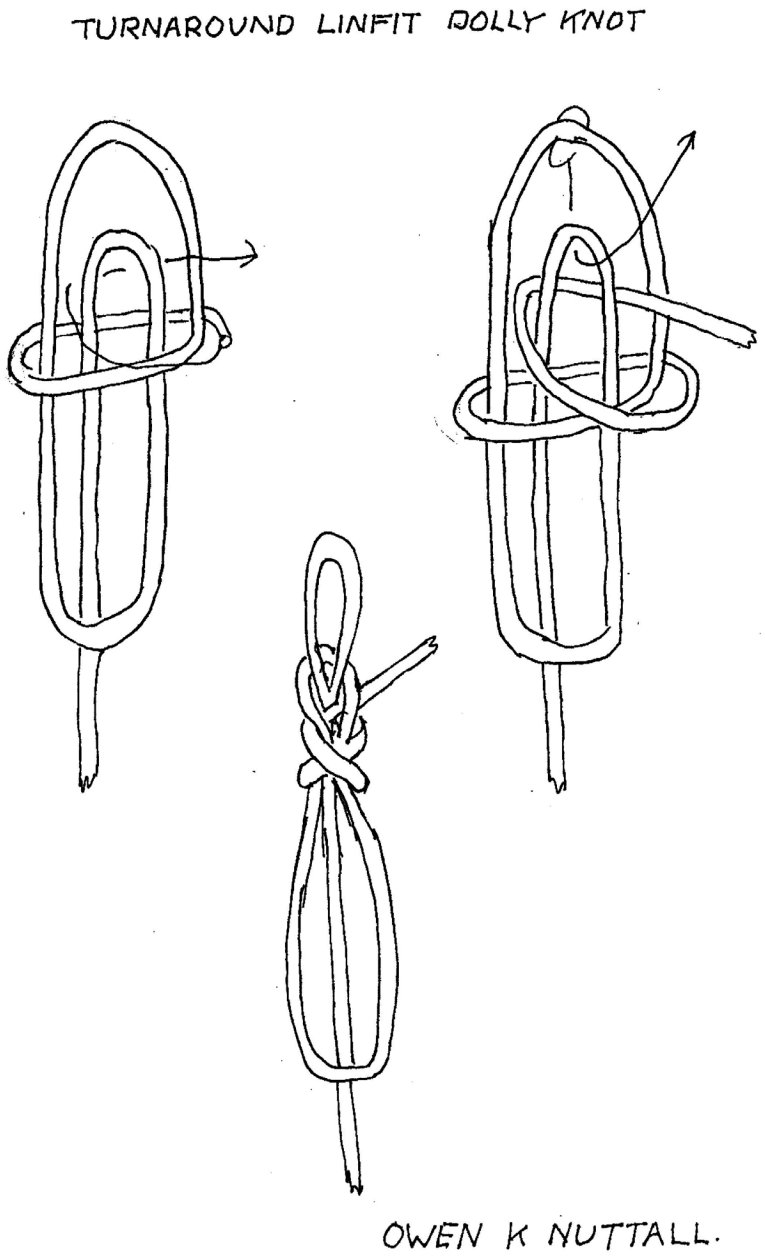
We regret to announce the passing of four of our fellow knot-tyers, whose photographs and details are shown on later pages in this issue. Please keep their families and loved ones in your thoughts and any prayers. May they all rest in peace.

Walter Seltzer - New York, NY - October 18, 2014

Don Rempe - Mercer Island, WA, September 11, 2014

Ben Selfe - Gloucester, UK - August 25, 2014

Roy Chapman - Coupeville, WA - August 12, 2014



Making a Key Fob Extraordinary

from

Joe Bennett

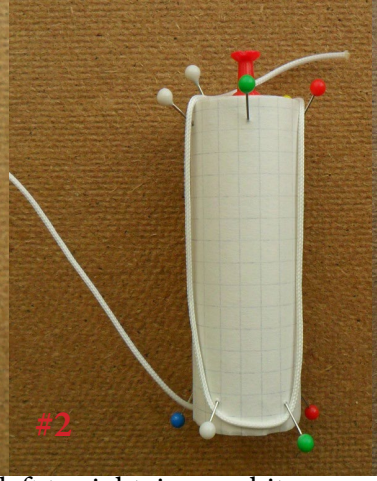
Tuesday, August 12, 2014
F O B
Here begins the tutorial for the fob shown in the centre of the display.

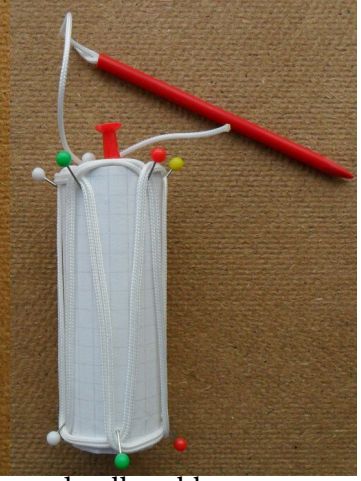
The mandrel used is two standard wine corks glued end to end and the core is a 25m.m. wooden bead.

The diameter of the mandrel must be greater than that of the core, otherwise the bead may not go into the knot. Therefore, I've wound a piece of card around the mandrel which gives it a diameter of 28m.m. and I've found this to be ideal for this size of core.
The finished covering is simply a column of 4-strand square sennit grommets woven into a doubled 3P*5B TH.

The TH is laid down so that there are no crossovers in the centre.
Place coloured pins as shown in the photo #1 [***p 12***].

#1





#3

The arrangement, from left to right, is..... white-green-red-yellow-blue.
Both ends are the same except that the bottom pins are offset to the right by half a bight space, as for a TH with an odd number of parts.
The red push pin indicates the top of the mandrel.

For the TH, I'm using 1.4m.m white venetian blind cord [VB] as it renders easily through the 11 grommets which comprise the horizontal work. Here is the run list for the TH.

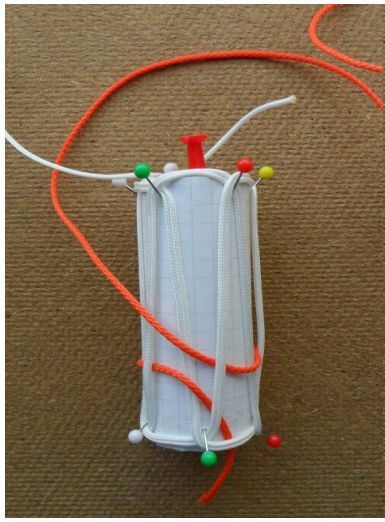
Starting at the top white pin,
DOWN around white and green [#2 above]
UP around red and yellow [#3 above]
DOWN around yellow and blue
UP over at white and around green
DOWN over at green and around red
UP over at yellow and around blue
DOWN over at blue and under at white
UP over at green and under at red
DOWN over at red and under at yellow
UP over at blue and under at white

This completes the first pass.....

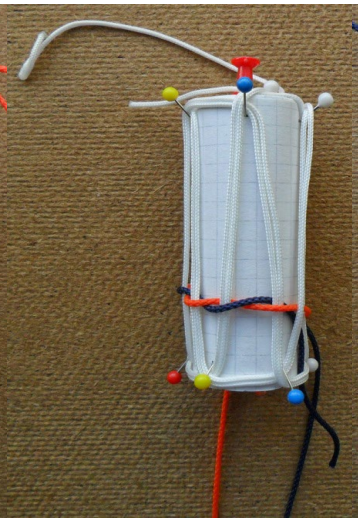
The knot is now doubled which gives 20 vertical parts of white into which the grommets can be worked.

For the grommets I'm using 1.5m.m. "Colourline" which can be obtained from ClassicMarine here in the UK. [http://www.classicmarine.co.uk/boatstore/product.asp?strParents=0,76&CAT_ID=172&P_ID=547]

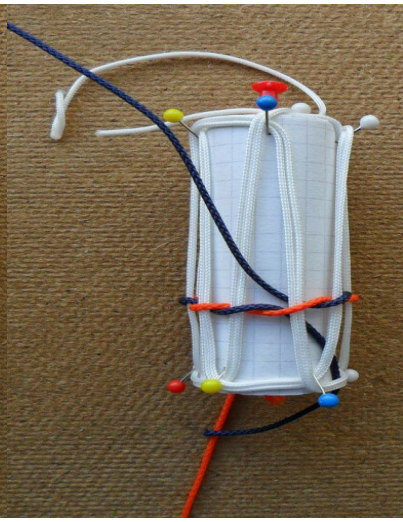
Cut four 2m. lengths of different colours.
Here I'm using orange, navy, green and yellow.
Take orange up through the bottom and bring it out at the compartment above the lower green pin. [#4 below]
Working from right to left, go O2, U2, O2..... and finish as shown in the photo [#4].



#4



#5

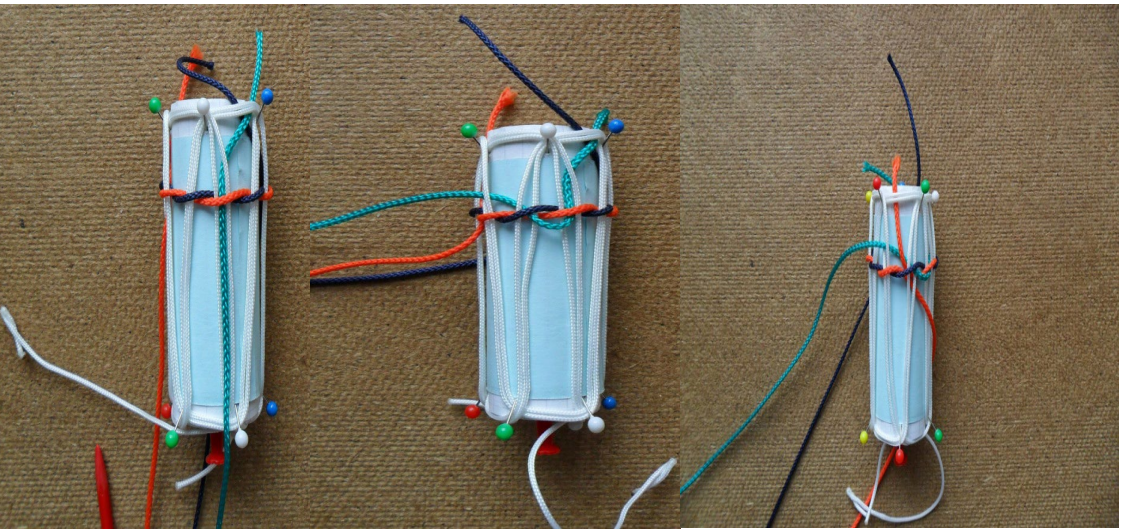


#6

Similarly, bring navy up in the compartment below the top blue pin and work a 2-strand common grommet as shown, finishing as shown [**#6**].

Next, turn the mandrel upside down and come up through the centre with green in the compartment shown [**#7**],

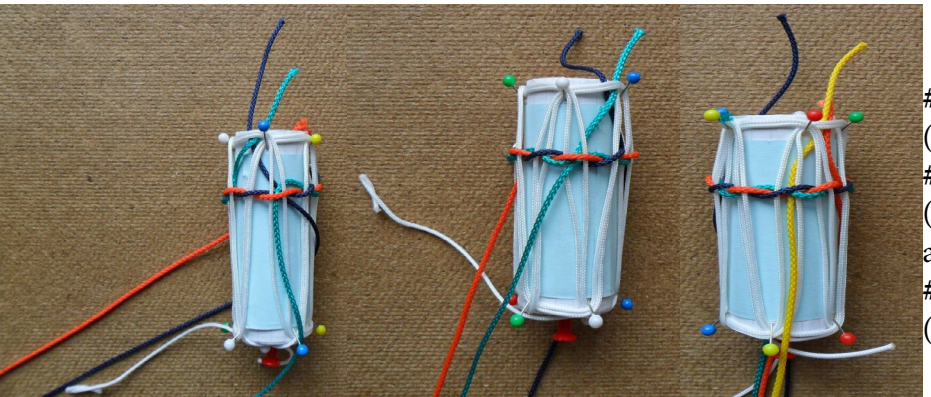
(1) Come straight down over navy and under orange [**#7**].



#7 **#8** **#9**

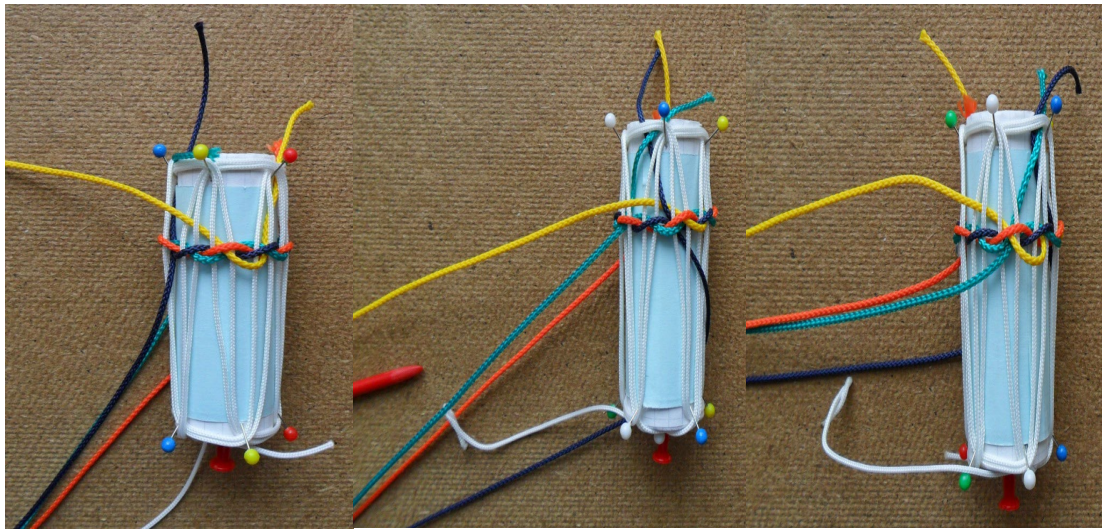
(2) Over two white, under navy and under two white. (working from right to left as **#7** shows).

Repeat these two steps throughout [**#8** & **#9**]. Make sure green goes under the standing part of orange and over the standing part of navy when these points are reached. Finish as shown coming down alongside the standing part of green [**#10**, **#11** below].



#10 (left), **#11** (center) and **#12** (right).

With the yellow cord, come up through the middle in the compartment shown [**#12** on previous page].
(1) Come straight down under navy and green and over orange.
(2) Over two white, under orange and under two white [**#13** below].

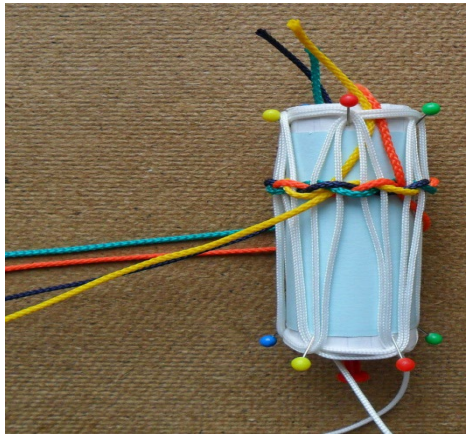


#13 **#14** **#15**

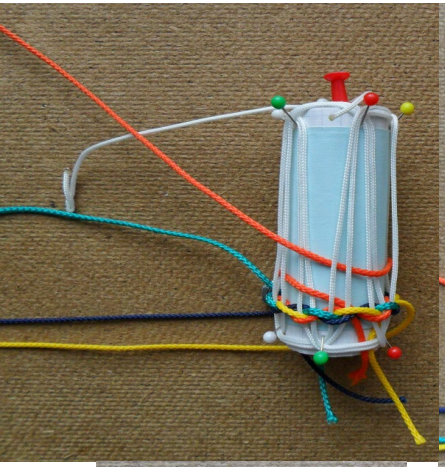
Repeat these two steps throughout. Come under the standing part of navy when you reach this point [**#14** & **#15** above].

You will go over both parts of orange naturally at the point where they meet. Finish with yellow similar to green and that is the grommet finished.

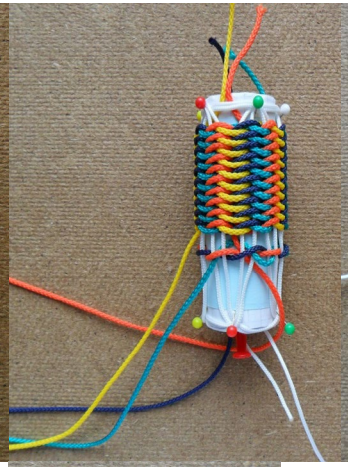
#16

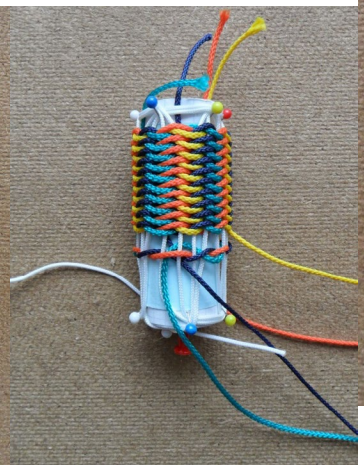


Now work the grommet down to the bottom of the mandrel to make room for the other ten and take out any excess slack [**#17**]. When making the next one, make sure each coloured strand comes up in the same compartment as it did in the previous one. (for this particular pattern). Continue until there are 11 grommets, working them down tightly together [**#18** thru **#21** below].

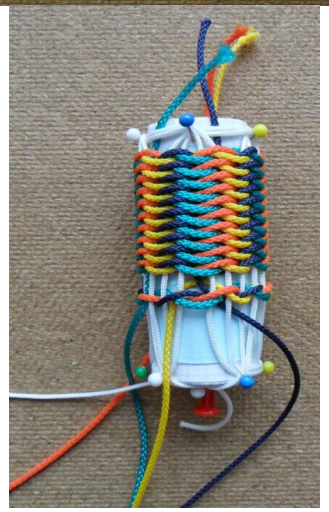


#17

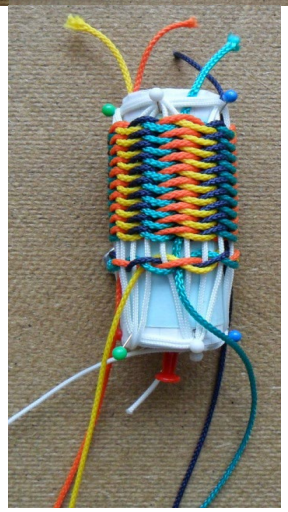




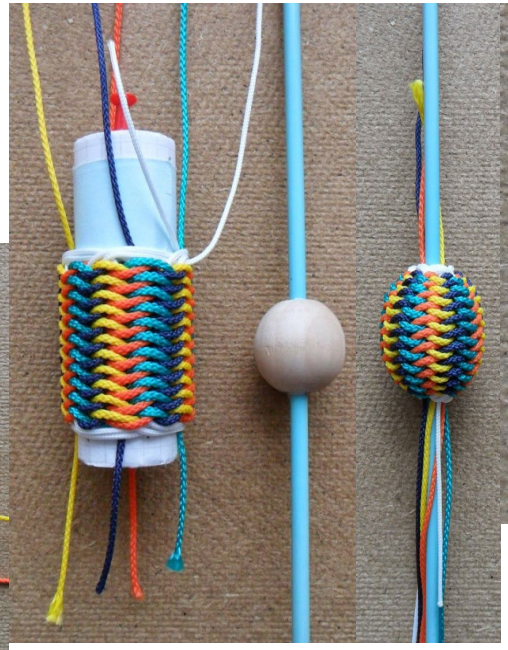
#18 & #19



#20



#21



#23 on bead(l), #24 (c) & #25 (r)

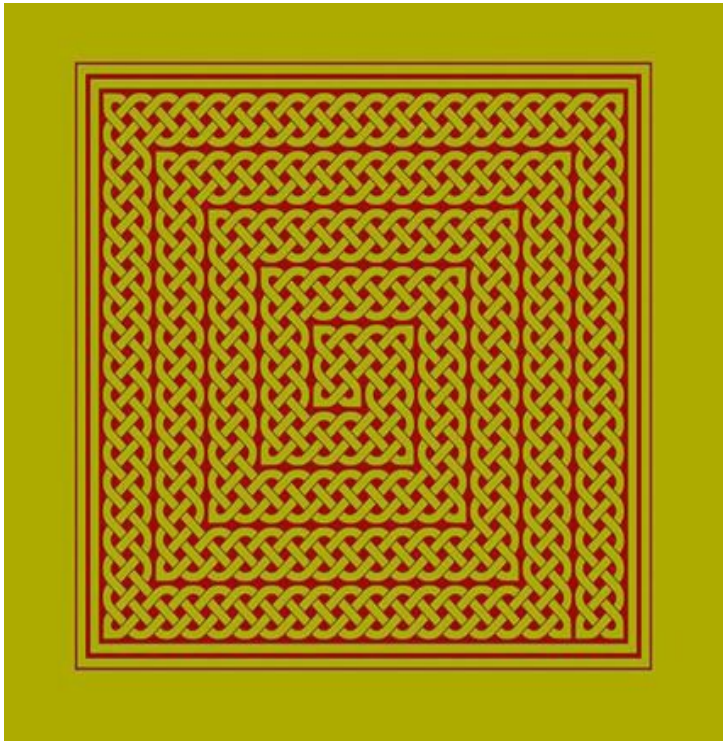
#22

Then take the 4 ends out through the top, remove the pins and take out as much slack as possible from the TH while still on the mandrel [**#22**]. This will hold everything together when the knot is removed from the mandrel. Remove the knot and insert the bead.

Start tightening the white VB cord. You can do this reasonably firmly. Having done this, take one of the coloured cords and, starting at the top, take out the excess slack all the way to the bottom.
Next, take another cord and do the same but from bottom to top.
Do the same with the other two cords, top to bottom then bottom to top.
You can now fully tighten the white cord firmly.
The coloured cords can now be tightened for the last time in the same manner as before [**#23** thru **#25**].

It just remains now to “roll” the finished fob and add a lanyard of your choice. The surface of this knot is particularly smooth, especially when “rolled” .
The knot behaves well both in the making and the tightening.

A fine example of a Long Turk's Head finished at each end with a Spanish Ring Knot - well done indeed! This example came from the hands of Marcin Takler. Below is a rawhide hobble, with button knots at each end, made handsomely by Armando de Ferrari - great work!



Selby Anderson posted this piece of Celtic drawing on Facebook - could it be made with cord, one wonders? The piece below was made by Tim George, braiding artist - magnificent precision and excellent lace cutting work with good alignment also!

Press Release from Martin Turner and edited for length:
e-mail martin.turner40@btinternet.com

Berwyn (Ben) Douglas Selfe: 9th December 1948 – 25th August 2014

Ben Selfe was born in Hornchurch, Essex in 1948, the youngest of eight children. His sisters had been evacuated to Wales during the war, and it was their choice that he should be named after their Welsh host, Berwyn. For much of his childhood, his mother was not in good health, and he was brought up by his older sister.

He had his first boat when he was just nine years old. His father agreed to pay half, if Ben earned the other half, which he did by working hard; one job was picking up stones from people's gardens. It was a fine lesson to learn from his Dad, who left the family shortly afterwards.

After school Ben was apprenticed to a Boat Builder and learnt carpentry to craftsman standard. He married a 16-year-old bride at the tender age of 19 and had two children. He even did a spell working in the tunnels, which paid better than carpentry.

He went on to run a boatyard in Poole, Dorset, remarried and won medals for ballroom dancing, and sang in a Barbers' Shop Quartet. On separating from a third wife and selling the family home, Ben bought a burnt-out 65ft narrowboat, 'Knot Krazy' that he subsequently refurbished under the M25 on the Grand Union canal, which was noisy but dry. For family reasons, in 2003 he sailed 'Knot Krazy' round to Saul Junction on the Gloucester & Sharpness canal.

Dictating his memoirs later, Ben wrote, "We arrived in Saul Junction. It was late afternoon coming into early evening when I picked up the lines and sat down in this beautiful, magical, spiritual, uplifting place. The sheer natural beauty, and the sort of boatyard I would love to have been part of (R.W. Davis) meant I was home. This was where I was meant to be."

British Waterways soon invited Ben to take up moorings on the towpath side of the canal, and he purchased a 70ft 1935 engineless butty, 'Lyra'. He became a local landmark and tourist attraction, and kept visitors enthralled with the history of the canals as well as knot tying, and some of his own experiences thrown in for good measure.

He was already a proud member of the International Guild of Knot Tyers, and began offering knot tying classes to boat owners that were well received. The notes he provided for these classes went on to become the basis of his book, '*Knots for the Cut*' which has become a classic of the waterways and is still available. (E-mail quicksilver7@btinternet.com to order.) As if all that was not enough, Ben went on to qualify as a Boat Safety Examiner.

In 2007, Ben was asked to provide all the fenders and fancy ropework for Ma Costas barge in 'The Golden Compass' starring Nicole Kidman and Daniel Craig. After months of hard work however, all Ben's fenders and a starring role ended up on the cutting room floor! In 2008, Ben was asked to bring a keel-less riverboat named the 'Eccles David' from her mooring on the River Humber near Nottingham to the Gloucester & Sharpness canal. With his son Clive, minimal crew, and after much preparation, they sailed her [by circumnavigating the south of England and then] miraculously up into the Bristol Channel to the Gloucester & Sharpness Canal.

On his return, Ben was diagnosed with lung cancer, which he fought manfully for five years and throughout remained in good spirits. He was determined to die on his beloved 'Knot Krazy' in his beloved Saul Junction, and he achieved this with the loving support of his family and the many many friends he made throughout his remarkable life. He is survived by his two children, several grandchildren and three great-grandchildren.

Ben was cremated at Gloucester Crematorium in a narrowboat-shaped coffin on Monday 8th September at 1.30 p.m.
If desired, donations can be made to Ben's favourite charities – the Cotswold Canals Trust and the RLNI - to L.W. Clutterbuck Ltd., 26 High St, Cam, Dursley, Glos GL11 5LE. Tel 01453 542754

A Small Gathering

from Our Midlands Stringer

Although the numbers were small, a meeting was held in the UK for those members unable to attend the IGKT half-yearly meeting in Hamilton, Canada.

Organised by Peter Hennessy, some 36 members from the UK, France and Germany gathered at The Blue Lias Inn, close to the heart of Warwickshire. Most came by road in motorhomes or caravans while some members stayed at nearby hotels. Three groups arrived by canal narrow boats, the venue being located on the Grand Union Canal. It was very nice to see some new faces among the crowd, and they were soon made welcome.

Friday evening was given over to renewing old friendships and setting up the displays before we retired to a room in the inn for a meal and a few drinks.

Next morning, there being no formal meeting, the day was given over to show and tell. Of particular interest was a demonstration of fender making from one of our more recent members, Phil English. Phil works locally as a professional fender maker to the canal trade, and it was good to see his excellent work. Another local member was Roger Callan, whose interest is practical knots. He talked about his interest in New Knot Technology and how to make knots secure using modern materials.

Bruce Turley provided a well-stocked shop of cords and accessories, while Sheila Pearson and Pauline Bentley carried out their usual sterling work of selling tickets for the well-stocked raffle table.

Unfortunately, the weather was poor during the day and put off members of the public from coming to view our hobby. We did get a number of boaters who had held a business meeting at the Inn and were invited to see our work. They were pleasantly surprised to see the range of things that could be done with knots and cords.

On the Saturday evening, we held our traditional Knot Tyers' Supper. Just prior to the meal, Chairman of the Council, Clive Sandrey, presented some engraved glassware to Dr Colin Byfleet in recognition of his period as President of the Guild. The evening was rounded off with convivial conversation while background music was provided by the 'Frayed Knots'.

Alas, Sunday came around all too soon, and it was time to gather up our displays and make our goodbyes until the next time.

Nigh-time view of the venue with lights reflecting on the canal

Phil English covers a tipcat fender [***"Tipcat" fender is the additional bolster used under a button fender at the back of a boat to give greater protection for the rudder if required, when a button fender is not long enough to reach beyond the rudder - Ed***].

Circular Mats
These decorative mats come from designs on Celtic tombs, from the mathematics of Lissajou and from African art.

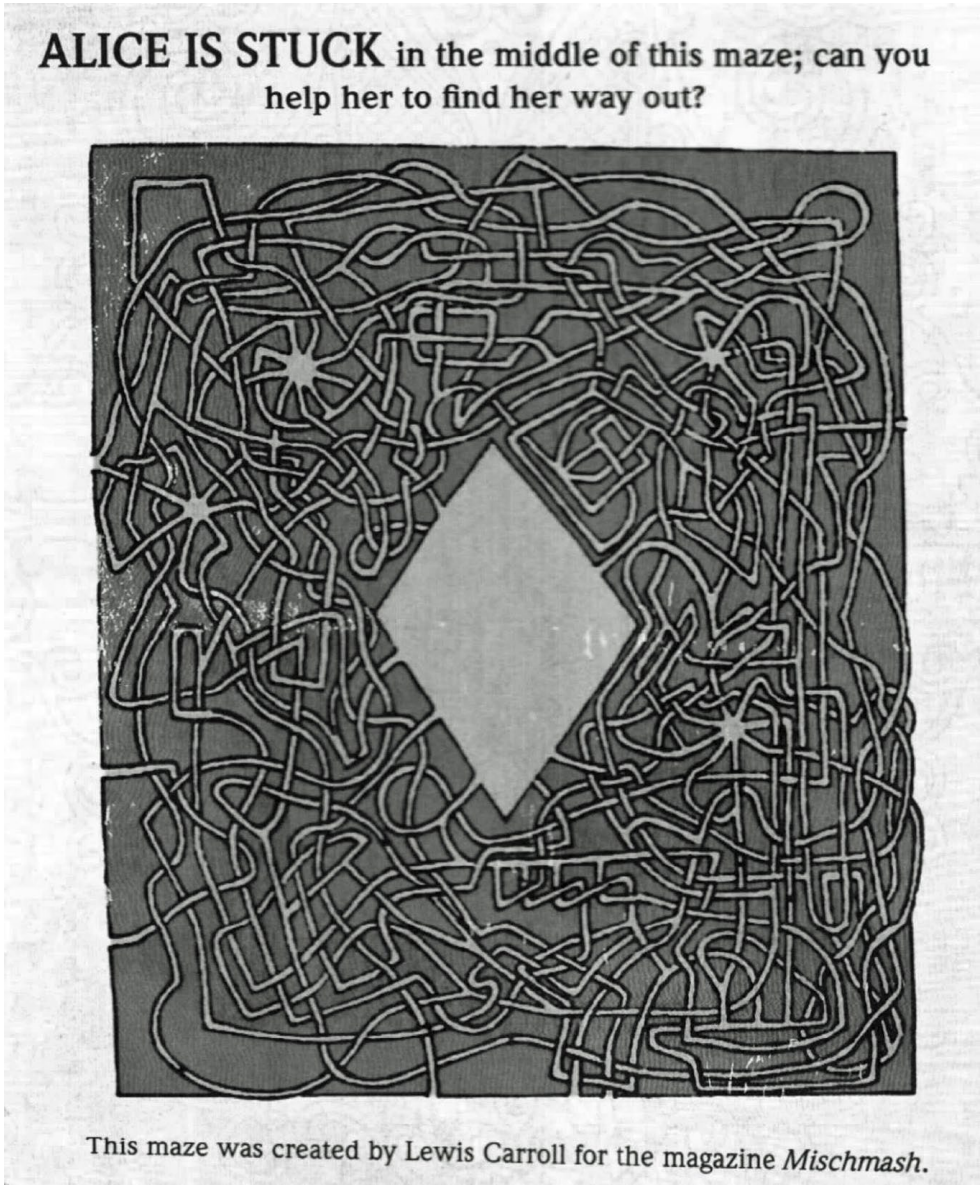
The descriptive label on the Circular Mats reads "Circular Mats - These decorative mats come from designs on Celtic tombs, from the mathematics of Lissajou and from African art"

A range of Celtic Mats from Colin Byfleet

Past President Dr Colin Byfleet admires his present [***of engraved glasses***]

Roger Callan explains New Knot Technology

THIS INTERLACED MAZE was drawn by Charles L. Dodgson (later to become famous as Lewis Carroll, author of Alice's Adventures in Wonderland and other nonsense writing), in the 1850s while a graduate student at Oxford University, for his family's homemade magazine Mischmasch. To escape from the central diamond to the outside, you may go over and under crossing paths, but must turn back at any single line barrier. [***This maze first appeared in KM24 under Geoffrey Budworth's editorship - Ed***]


ALICE IS STUCK in the middle of this maze; can you help her to find her way out?
This maze was created by Lewis Carroll for the magazine *Mischmash*.

Notes from the President

September 2014

When considering IGKT's foreseeable future, I believe that it is very important to welcome members from a new generation in order to keep our association alive and world-renowned. We need to focus on recruiting people from different horizons who are keen to discover the fun of knot-tying. One important approach would be to welcome families who come to our events with their young children. I am always delighted when I see, at our various meetings, young people accompanying their parents, willing to try a few knots. Transmitting enthusiasm and passion about knots is a very good move on the part of the parents. After all, knotting is not an expensive hobby. While it is true that young people have many demands on their time in order to learn about a great range of information and activities, I believe we should focus on making links between knotting and other activities of interest to young people, such as sport. There is a very wide choice if we consider the links between knot-tying practise and other activities: for instance, think about tying a secure Tyrolean traverse for climbers.

When someone in a family is able to tie knots, make splices and produce spectacular decorative knots in front of sons and daughters, grandchildren, nephews and nieces; and then when he can explain clearly what he is doing and for what purpose, be it practical or aesthetic, it is most probable that the young people will ask questions, wanting to know more and more. They may want to try and learn some knotting tricks, just to show off to their friends afterward.

Last summer, at the famous Douarnenez Maritime Festival ''Temps de fête" (a kind of traditional sailing boat rally) a large team of IGKT members was present, both from the French branch and elsewhere. The UK, US and Germany were well represented. A young boy of around twelve years old, who had already met us two years ago at the last event, was back again. He remembered all the folk from IGKT and was looking forward to seeing us again. Being among the older knot-tyers and staying with them for the dinner was his dream. As a result, he is now our youngest member and we are very proud to welcome him. He is so eager to acquire knotting knowhow that we may reasonably expect that he will turn out to be a great knot-tyer in due course.

There are other ways to attract new members: the "six-knot challenge" appears to be a very valuable competition in getting the attention of young people. Recently, I heard from John Staley, President of the Southern Ontario Knot Tyers. With Dave Lambert, John periodically organises this superb challenge among the scout community in Hamilton. For extra information, see the link from a local newspaper: http://www.thespec.com/news-story/4872822-mahoney-knot-tying-skills-are-not-for-naught/

Also don't miss, on YouTube, the very entertaining song about the Trucker's Hitch. Check it out at www.youtube.com/watch?v=TUHgGK-tImY. Whether you can sing or not, tying one knot every day can also be a good start to acquire skills rapidly.

So, there are many ways to promote the IGKT : show the publication, Knotting Matters, to your friends ; set up contacts and share activities with other charities or educational organisations. Above all, every IGKT member should think about how he or she can be an ambassador for the Guild. In your own way, you can communicate why you are keen to follow events and travel long distances just for the pleasure of meeting others interested in knot-tying. Think about showing off your skills and talking about your interest on social media or even in the pub. Forging such ties will increase and strengthen our world-wide community of knot-tyers.

How I Did It

by Glenn Powell, CA USA
Crew member aboard brig Pilgrim, Dana Point

All line in this knotting is cotton #15B from www.knotstuff.com.

The knife handle is covered in needle hitching. At the end the single strand was formed into a three strand braid. Once it was long enough for a good sized loop, I seized and CA [***cyanoacrylate or "crazy"***] glued the end back to the strand where it emerged from the handles hitching. I covered this seizing with a single strand star as described in your [***The Ultimate Book of Decorative Knots by Lindsey Philpott***] book. It hides the seizing well, cinched down tight and looks spiffy too. The handle gives a good grip and softens any impact on the many things one finds once he attaches something to his belt.

The lanyard I use on the knife starts with a brass snap hook; I put a three strand braid through the eye, clapped a constrictor on to hold the strands together, then tied the first six strand MWK. Once tightened and dressed, I followed with a length of six strand round braid. As I approached the end I tied another six strand MWK. I separated the emerging strands and made two three strand braids for about an 1 $^{1}/_{4}$".

Prior to arriving at this point I pre-made a short three strand braid into a small loop then used the six strands to make a star knot. This finished star knot was threaded through on one of the legs of three strand braid and then both sets were made into another six strand MWK. This makes a little button for the end loop (I recall this being called "frogged in" at some point but where escapes me now likely www.frayedknotarts.com tutorial pages... it is where I stole... er .... *learned* most of the knot work in these pieces). I followed with a couple more inches of six strand round braid. I then pulled out three strands which I braided into a loop that I laced through the other three strands. Then a change of direction with over two fender hitching as a collector knot. Finally I capped the collector with a six strand doubled diamond.

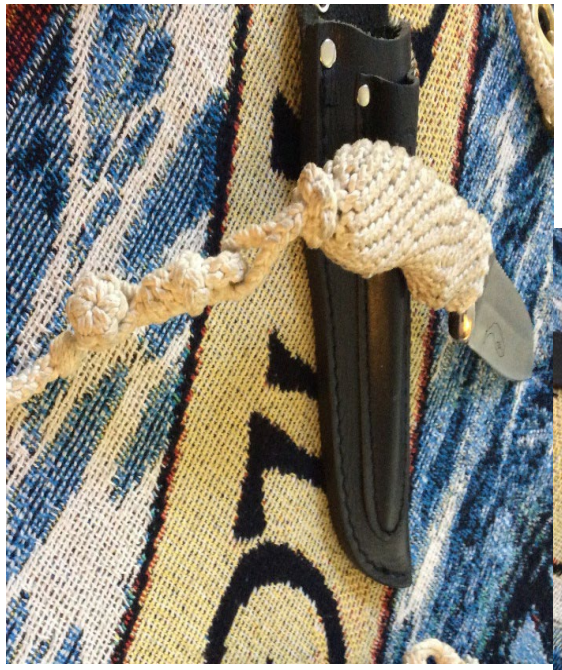
The sheath for the Marlinspike is macramé/square knotting. This uses six strands. I doubled one of the strands and used it as the base. I then larksheaded (sp? This made my spell check throw its hands up in disgust with me) the remaining five strands to it. Then I ran the first strand ends through its own loop and pulled all the knots close together and tight. I then had twelve strands (multiples of four for the pattern to mesh) to square knot with and form a cylinder for the sheath.

To tie this you grab a strand, skip two strands and use the next strand. These two tie a square knot around the inner two. Continue this pattern around until you have a row. Then the inner strands become outer strands and you follow around for another row. I keep the inner strands taut and give them all a good tug before starting another row. After a few rows I used the spike itself as a base to tie upon and stretch the cord; after 14 rows I figured I had enough coverage & then had to figure out a finish (damn my improvising).

I ran out a few inches of 8 strand flat braiding, folded it back and with a Swedish fid followed the strands at the base of the braid backwards a few tucks each, interweaving it on its self (a pretty typical technique in leather), CA glued and nipped close. The remaining strands became four strand round braid which I fashioned into a loop for a lanyard attachment point. I tucked it back into and through the sheath and where it eventually came back out I resumed the braid, after a few inches terminated it with Ashley's button knot (#880) as another place to attach a lanyard(you can never have too many places for that I have found).

The lanyard on the spike is made from two long strands which I ring bolt hitched then worked into a brass thimble. I did a four strand round braid for about two feet. I threw a four strand MWK in here and let the four strands be separate about an inch and then tied another four strand MWK. I like the purposeful interruption here; initially it was to allow a softer flex near the tool's neck, a little bend. But it also has the effect of showing the elemental within the complexity, showing it's heart so to speak.

But I digress... after the second MWK I separate one strand, and tie it back on itself as a long loop. Then the remaining three strands alternate crown hitch tightly around the loop for about an 1 $^{1}/_{4}$". I covered the base of the thimble with a 4B x 5L TH as a finish.



Royal Princes Splicing

by Des Pawson MBE

Lindsey ,

The piece by Colin Grundy on Royal Princes was interesting [***KM 123, pp 43-45***] , There must have been a lot of interest at the time with the two Sailor Princes You should find attached 2 images [***below***] one a Carte de Visite by the Royal Photographers W & D Downey and then the black & white image from The London Illustrated News May 25th, 1878, which was derived from it .

Roy Chapman

An Article He Wrote for the Knot News newsletter of the Pacific Americas Branch, published shortly before his death

Once again the customer is right. A few years ago I made a lanyard to hang a suet cage for feeding birds. The customer provided strange hemp-like garden hose so I made up the lanyard. We have a lot of 50 MPH wind and the cage blows all around under the eaves. She asked if I could make a second and more robust lanyard with stronger cord (never mind she selected the first batch of cord…). Once again she provided the hardware, so now the poor wee screw eye will be the next weak link and I'll get to make the next generation in a year or two when the screw eye pulls out of the eave. I wonder if the birds can see the reflective stripe in the paracord? This is a repeat customer so she gets the Good Old Boy discount. She also gets to pay a fellow to hang out the second floor window to hang this off the fascia.

Funny about customers. A few years back a fellow bought me some really robust double braid and hardware to make up an emergency tow line for his boat. Customer is always right so I made it up per request with the cautionary note that if he ever used it and the attachment to the boat failed that the hardware might achieve orbital velocity. He called me a few weeks ago to tell me how he used the line in a heavy seaway in Seattle and how glad he was to have it and so forth. Go figure. Thank my stars that bird feeders (even full of suet) are mostly safe.

Safe travels to you Roy.

Roy Stanley Chapman died the evening of August 12, 2014 at his residence in Coupeville, WA. The cause of death was arteriosclerotic cardiovascular disease and the manner of death was natural. He was 69 years old. Roy was a past President of the PAB.

Don Rempe

as reported by his son to Knot News

Don Rempe of Mercer Island, WA passed away on Sept 11, 2014. He had just turned 80 and his passing was very peaceful. Don truly enjoyed the art of knot tying and valued his membership in the IGKT and the PAB.

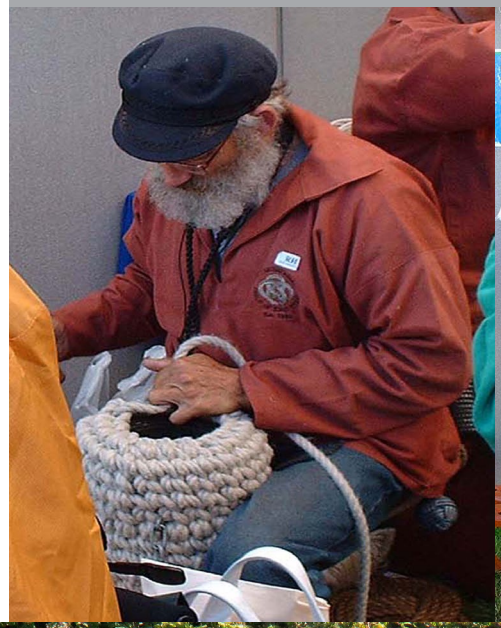
Walter Seltzer

as reported on Facebook by his family

Known as The Knot Nut and Creative Designs on the web, educated at University of Miami, Rosensteil School of Marine Technology. Had a great admiration for the works of knotting by others and will be missed by family and friends alike. Thank you to our friends and family for your prayers and kind thoughts for my Mom and Stepdad - Walter Seltzer. Sadly, Poppy's fight is over. God was good in giving him to us for the last 32 years. He was a good man, wise, very kind, and a gentle soul. Family (first) and fishing were his two passions - he adored his children, my siblings, my Mom, and all of his grandchildren and he loved teaching them anything and everything that he had to share. You will be missed poppy.

Ben Selfe

as reported from England by his family and his many friends



Ben's funeral and memorial service congregation

It was with some sadness that we learned of the death of Ben Selfe, but not a surprise. We were pleased we had the opportunity to spend some hours with Ben when, during the summer, we moored alongside his boat, Knot Krazy, that was his home on the Gloucester and Sharpness Canal at Saul Junction [***at left***].

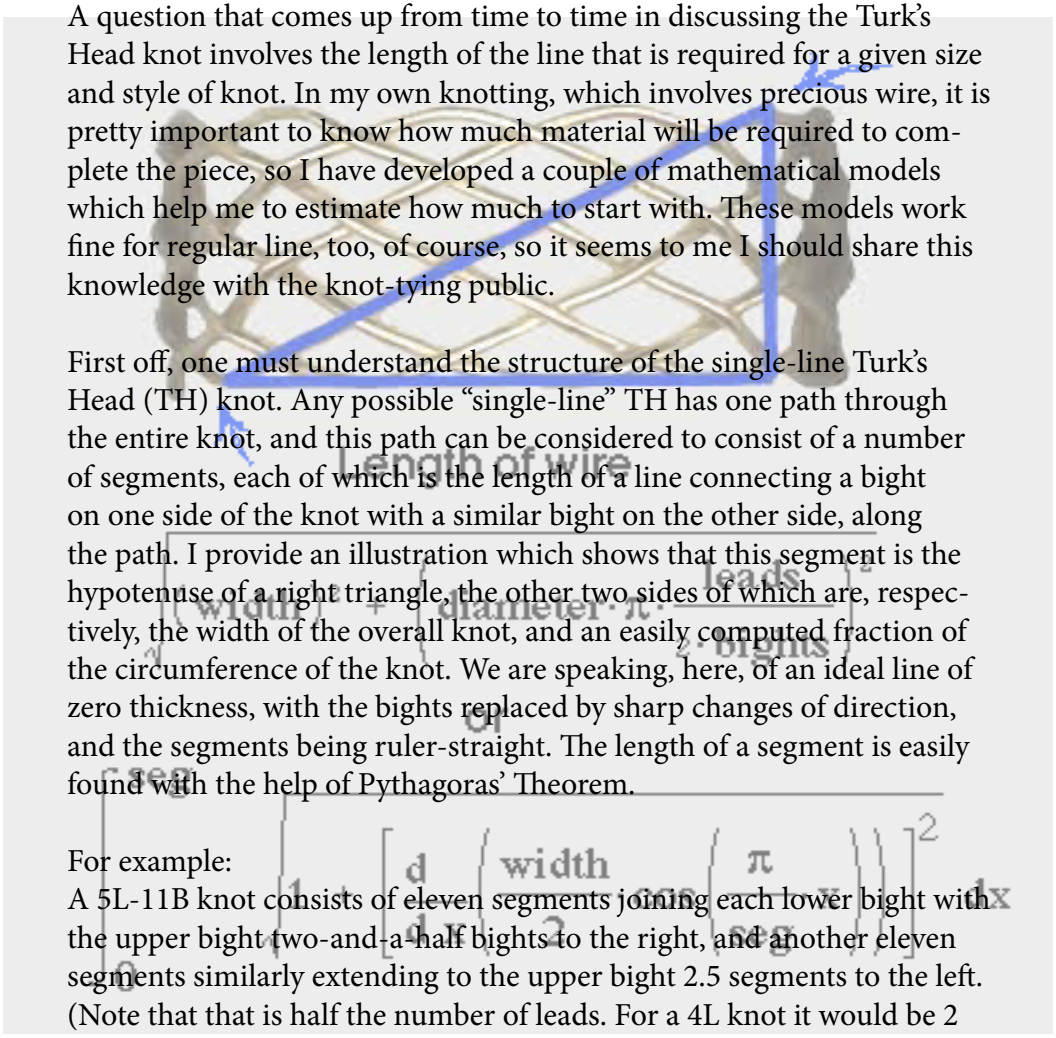
Despite his illness, Ben was extremely positive about his condition and that he would soon be no longer with us. Our chat was wide ranging in content from the past to the future, with just a small amount of knot talk.

Thank you Ben for letting us share part of your life.
Colin Grundy and Jane Bamford

A Mathematical Discussion of the Single Line Turk's Head Knot

by Loren Damewood

A question that comes up from time to time in discussing the Turk's Head knot involves the length of the line that is required for a given size and style of knot. In my own knotting, which involves precious wire, it is pretty important to know how much material will be required to complete the piece, so I have developed a couple of mathematical models which help me to estimate how much to start with. These models work fine for regular line, too, of course, so it seems to me I should share this knowledge with the knot-tying public.



First off, one must understand the structure of the single-line Turk's Head (TH) knot. Any possible "single-line" TH has one path through the entire knot, and this path can be considered to consist of a number of segments, each of which is the length of a line connecting a bight on one side of the knot with a similar bight on the other side, along the path. I provide an illustration which shows that this segment is the hypotenuse of a right triangle, the other two sides of which are, respectively, the width of the overall knot, and an easily computed fraction of the circumference of the knot. We are speaking, here, of an ideal line of zero thickness, with the bights replaced by sharp changes of direction, and the segments being ruler-straight. The length of a segment is easily found with the help of Pythagoras' Theorem.

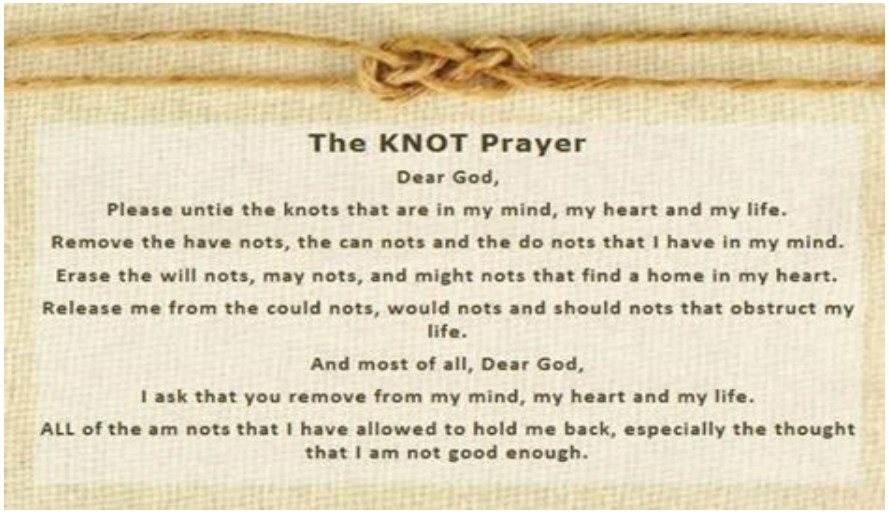
For example:
A 5L-11B knot consists of eleven segments joining each lower bight with the upper bight two-and-a-half bights to the right, and another eleven segments similarly extending to the upper bight 2.5 segments to the left. (Note that that is half the number of leads. For a 4L knot it would be 2 segments to the right and 2 to the left, for a 7L knot you would use 3.5, as shown in the illustration.)

Observing that the total circumference is 11 bights, the length of the fraction of the circumference is found to be 2.5/11ths, or 5/22nds, of the total circumference of the knot.
Therefore, should you wish to tie an ideal (remember, infinitely thin line, no smooth curves) 5L-11B Turk's Head with a width of 1 inch and a diameter of 5 inches, you would need:
{(5*pi*5/22)^2 + (1)^2}^(1/2) (the square-root of the sum of the diameter times pi times five-twenty-seconds, squared, and the width, squared) *22 (the number of segments) =81.56 inches

This is very cumbersome unless you're used to it, but having worked through one of these it is clear that the same results can be obtained by multiplying the number of leads by the circumference (pi times the diameter) to get one leg of the right triangle, and multiplying the width by twice the number of bights, to obtain the other leg.
{(5*pi*5)^2 + (1*22)^2)}^(1/2) = 81.56 inches. Much easier, as I'm sure you will agree.

In the real world, there may be a considerable difference between this result and your actual usage of material, so this should be regarded as a conservative estimate! The curvature of the line, and its diameter, will both add to the overall length required, but as a rough estimate it is a good start.

Looking at a nicely tied Turk's Head, it occurred to me that the path described a cosine through a cylindrical space, and while I was sure that I could use three-dimensional equations to describe it, I chickened out and decided to model it as the same curve over a linear distance in two dimensions, that distance being the product of the number of leads and the circumference of the knot. I will not weary the reader with the calculus required to determine the length of a curve in space, but having performed this calculation on the same starting dimensions and obtained a number somewhat less than 1% larger than the previous result, I would venture to say that there is little to choose between them for accuracy, and a great advantage in using the simpler one with a fudge-factor of two or three percent over the calculated result.


The KNOT Prayer
Dear God,
Please untie the knots that are in my mind, my heart and my life.
Remove the have nots, the can nots and the do nots that I have in my mind.
Erase the will nots, may nots, and might nots that find a home in my heart.
Release me from the could nots, would nots and should nots that obstruct my life.
And most of all, Dear God,
I ask that you remove from my mind, my heart and my life.
ALL of the am nots that I have allowed to hold me back, especially the thought that I am not good enough.

ARCANE KNOTTINESS

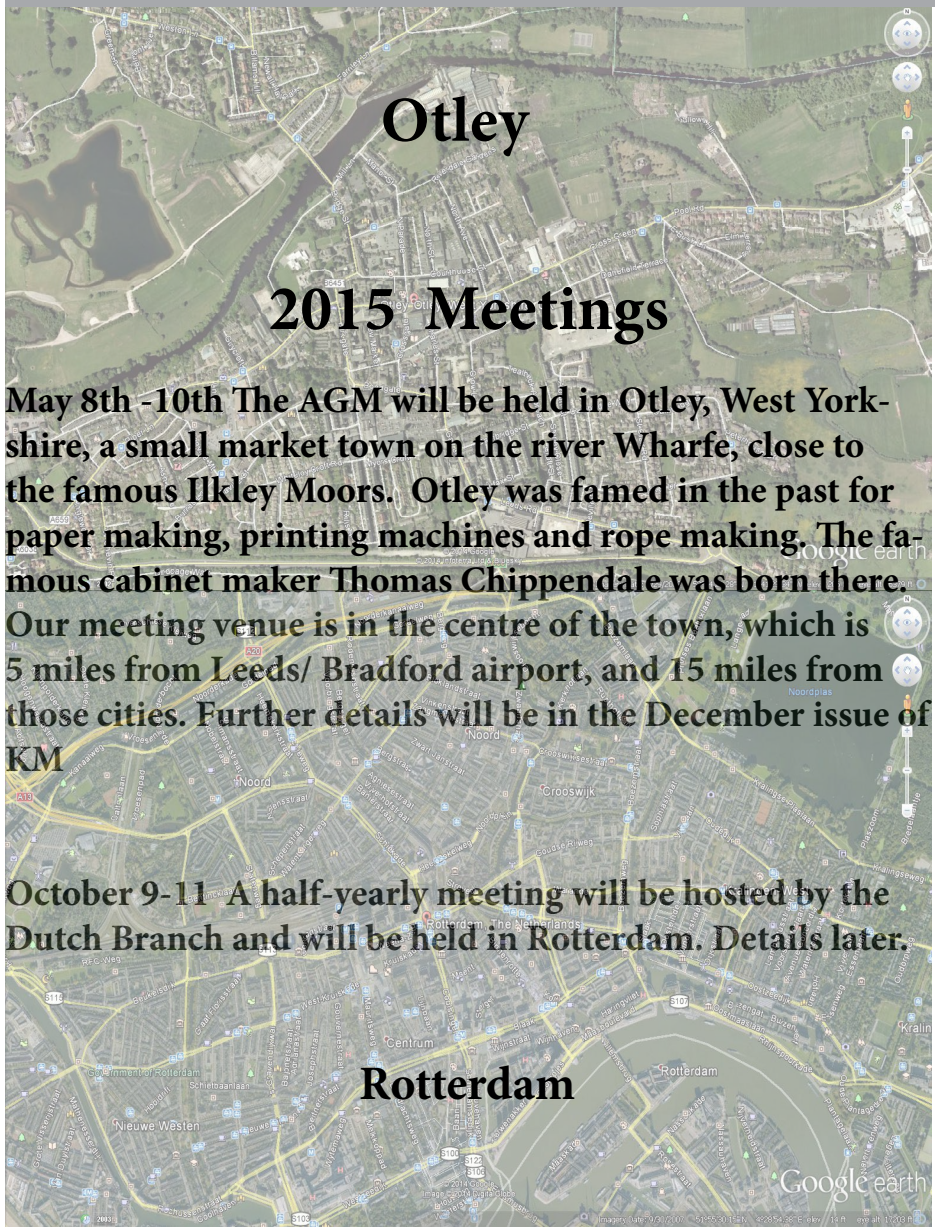
When Ajax Penumbra, a post-graduate junior acquisitions librarian, is tasked with tracking down a long-lost occult book – *Techne Tycheon* – his exhaustive coast-to-coast pursuit of leads – from the feasible to the fantastic – ends in failure. Persuaded that the Tycheon might be gone for evermore, he confesses as much to his superior; who reminds him that a colleague recently recovered the six-hundred-year-old *Incan Book of Dreams*. "It was composed entirely from knotted string, my boy," he croaks, "and they had taken it apart to make sweaters." He says it again for emphasis: "It was in … the villagers' … sweaters."

[From Ajax Penumbra 1969 by Robin Sloan, the prequel (published in 2013) to his international best-selling first novel *Mr Penumbra's 24-Hour Bookstore*, published in 2012.

Simple science of untangling

Scientists have come up with a solution to stop strings getting tangled spontaneousiy: clip the ends rogether to make a big loop. Afler 12.000 tests on strings each two to six feet long. researchers were able to build on the mathematical theory that the likelihood of a string getting tangled increases exponentially according to its length. Robert Matthews, a physicist at Aston University in Birmingham, UK, organised the study

2015 Meeting Plans



2015 Meetings

May 8th -10th The AGM will be held in Otley, West Yorkshire, a small market town on the river Wharfe, close to the famous Ilkley Moors. Otley was famed in the past for paper making, printing machines and rope making. The famous cabinet maker Thomas Chippendale was born there. Our meeting venue is in the centre of the town, which is 5 miles from Leeds/ Bradford airport, and 15 miles from those cities. Further details will be in the December issue of KM

October 9-11 A half-yearly meeting will be hosted by the Dutch Branch and will be held in Rotterdam. Details later.

Following the Thread

by

Colin Ledsome M. Eng, C. Eng, FI MechE, FIED, MCMI, FBIS, MDS

(with Author's permission as submitted by Maurice McPartlan)

Following the Thread (In Technology Date? Number? Pp.10-13)
Colin Ledsome,
One of the earliest human inventions has been a key factor in our development for many thousands of years. In any measure, tonnage, monetary value, or volume, we have used more of this than any other manufactured device. It comes in many forms and can be made from many materials, and yet we take it for granted. What is this wonder technology? The answer is cordage, the general name for thread, string, cord, rope. hawser, and cable.

Its related forms include woven cloth, belts and straps, knitting, fibre-reinforced materials and even basket weaving. Ropes have been used structurally as fasteners and tension members (both in linear form and as a cloth); various mechanical devices, with pulleys for lifting and pulling, as belts for transmitting power, and as bowstrings, snares, slings, or other hunting weapons; as wire for fences and high strength uses as wire rope, and much more.

Let 's not forget the companion technology of knots and splices, which has played a vital role in the exploitation of cordage. Yet rope and knots are rarely mentioned in current engineering and design courses, or even in history courses, and have attracted very few research projects on their modern use. Indeed there is still no theory which can fully explain how a long rope, spun from relatively short fibres, can retain its strength and integrity despite considerable deformation. No current analysis can predict how strong a knot configuration in a particular material will be. It's always easier to tie one and test it. Both rope and knots are classic examples of iterative evolutionary design, which still continues to this day.

Much of the rope now available is braided, either as a tight braid of spun strands or a woven tube of hard wearing material, protecting a bundle of long strong fibres of synthetic materials running the length of the rope. There remains a major market for traditionally spun twisted rope made from shorter natural or longer synthetic fibres. The spun structure deserves closer examination. Take a short piece of spun string (not braided) and hold it at its ends. Twist one end between finger and thumb to increase the twist already in the fibres. Get someone else to pull the centre of the string, keeping it taught , while maintaining the tension, and bring the two ends together. If the centre loop is released, the string will twist around itself in the opposite direction to form a fatter string. What has happened is that the two halves of the string have tried to untwist, but because they are connected they can only twist round each other. The more twist you put in, the tighter the result. That is the fundamental action of spinning a rope. In engineering terms, a spun rope is a complex multiple-helix structure held together entirely by the friction generated by torsionally pre-stressing its fibres. (Try putting that in an FEA program!) [***FEA = finite element analysis***]

If you take a long bundle of fibres which have been 'carded ' (teased between a pair of brushes to make them all lie in the same direction), ease out a small amount, twist and pull it , the friction between the fibres will pull more from the bundle .The thinner parts of the growing 'yarn' will twist more, increasing the friction between fibres resisting the pull. The fibres in the fatter parts will slide across each other until they also become thin enough to twist more. With care, a fairly uniform twisted yarn can be drawn from the fibre bundle. For many thousands of years, this was the task taken up by anyone who did not have something more urgent to do.

Tools evolved to make the task easier. A 'distaff' is a short rod, round which the carded fibres were wrapped. Fibres were pulled from the distaff to be spun into yarn and wound onto a bobbin. This was such a necessary activity that, in medieval times, even ladies of the manor would spend much of their spare time spinning yarn from flax or wool (Hence the historic reference to wives being on the distaff side of the family.) Eventually this was made more efficient by the slow spread of the spinning wheel from Asia in the 11th century. This produced a tighter and more even thread .The spinning wheel was superseded by the spinning jenny and the spinning frame at the beginning of the industrial revolution in the mid 18th century. This produced yarn in sufficient quantities to allow the mechanisation of weaving looms and the growth of the factory system.

If several yarns are twisted separately, and then spun together, they form a 'strand'. Several strands are twisted together to form a 'rope', several ropes make a 'cable' and finally several cables make a 'hawser'. Since yarns are normally given a right-hand twist, strands and cables will be left-handed and ropes and hawsers right-handed. Most rope was three-stranded, although four or more strands were used where rounder, more flexible sections were needed, usually when passing through pulleys. Five or more strands were often stabilised with an extra core strand. Plaited or braided ropes made by hand were rare and mainly for decorative use. Left-handed ropes were rarely used, since they are almost impossible to securely splice with right-handed rope. Ropes were made in long 'rope-walks' where a team of people guided the formation of the rope from strands rotated by a geared system at one end of the walk The maximum length of the rope was limited by the length of the walk. Today both spun and braided rope can be made continuously by fully automated machines to any length required.

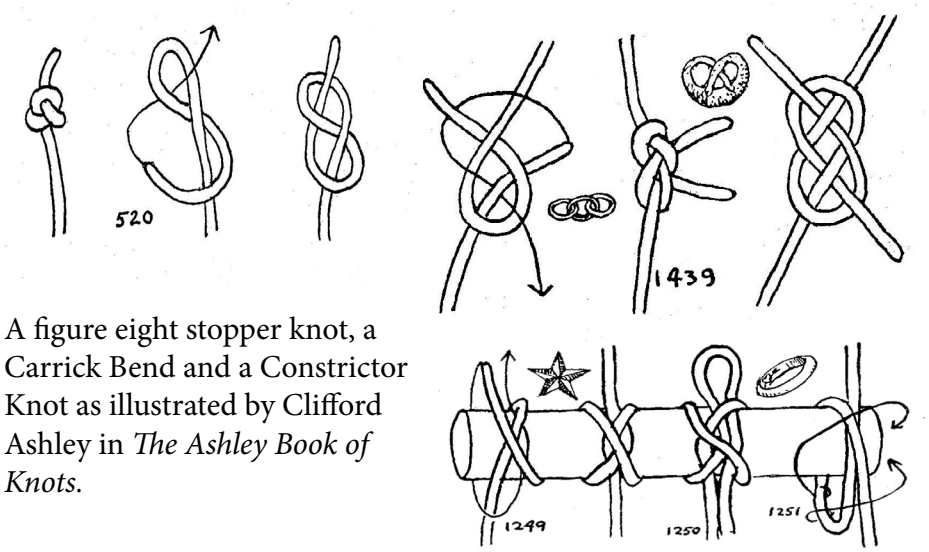
Since early rope was made from natural fibres, it rarely survives for archaeologists to discover. A short length of two strand left-handed fossilised rope was found on the floor of the Lascaux caves from 17,000 years ago. The earliest microscopic remains of a few twisted dyed fibres date back some 30,000 years, found in the Dzudzuana Caves in Georgia (Asia).

The earliest arrow-heads, which must have been shot using a bowstring, are more than 50,000 years old. It is reasonable to assume that some form of cord must have been in use from the early years of our species perhaps 75,000 years ago, long before homo sapiens migrated out of Africa. (Interestingly, you need an opposable thumb in order to twist fibres or tie knots, so the ability of making cordage may have been an important advantage in human evolutionary development.)

Knots pre-date spun rope and were probably initially tied in vegetable fibres and animal sinew and gut. We can speculate that early uses were to bind spear points in place, fasten skins together for clothing (perhaps, using early needles), and to wear as part of a necklace or braided bracelet. Simple knots were probably discovered by accident, getting rid of an end of string by tucking it through a loop. Different types of knot arise for different situations: tying two ropes together (a 'bend'), fastening a rope to something (a 'hitch'), tying things in a bundle (just called a'knot') or to stop a rope unravelling (a 'stopper knot').When spun rope became more established, splicing was developed, where the strands of ropes are woven together to permanently join ropes or form loops or other constructions. Whipping or serving, where small diameter cords are wound around larger ropes to stop unravelling or excessive wear, were developed as ropes were used more extensively.

Most of the nations which have played a dominant role in history. have had large sailing fleets for both commerce and warfare, from the Phoenicians over 3000 years ago, up to the late 19th century when steam power began to take over. For a large sailing vessel, rope was a fundamental part of its structure as well as its machinery for hoisting sails and for tying down, or up, almost everything else on the ship. For fighting ships in the British Navy, from Drake to Nelson, rope could be 10% of the weight of a ship. Marc Brunel (lsambard's father) made his fortune by inventing machinery to manufacture wooden pulley blocks for the navy. Examples of these blocks, and the machinery to make them, can be seen in several museums.

In the last century, modified versions of everyday knots have been developed to cope with the low friction of many synthetic materials, usually putting in extra turns and tucks. New knots for climbing, fishing, bundling electric cables, tying shoe laces and neck-ties, variations on medical sutures and more are developed every few years. Most people know-how to tie between six and 10 knots. These usually include a simple thumb knot (also used as a stopper knot), a granny knot (two thumb knots jammed together), a reef knot (two opposite-handed thumb knots - easier to undo). a slip knot loop (a thumb knot with a loop), a double slipped reef knot (a bow for tying shoe-laces), a simple necktie knot (technically, a topsail halyard bend!) and often a bowline loop, a clove hitch and a few more you remember from some youth organisation or a hobby you once had. Here are a few useful ones you may not know:



A figure eight stopper knot, a Carrick Bend and a Constrictor Knot as illustrated by Clifford Ashley in *The Ashley Book of Knots.*

There are a number of books about useful and decorative knots. The illustrations used for this article are all taken from *The Ashley Book of Knots* by Clifford W Ashley, first published in U5A in 1944 by Doubleday and in the UK by Faber and Faber in 1947. It is the most comprehensive collection of knots available, describing some 3900 knots with 7000 excellent hand-drawn illustrations, and more interesting to browse through than it sounds. My copy dates from 1962. It is still in print.

Branch Reports

Pacific Americas Branch: We now have nominations for President, Secretary/Treasurer, Librarian and 2 of the 3 Board members at large. In addition our Webmaster position has potentially been filled (confirmation not yet received). We would like to thank all those who have stepped forward to continue the good work of the last seventeen years and those who will continue as Board Members and as Welcoming Committee to our new members joining. All meetings of the Branch may be conducted by e-mail, written correspondance, landline or cellular telephone, VOIP or in person at agreed locations, as decided by those elected. Please send your nominations to Secretary Jimmy Williams at the Branch e-mail address on the back inside page of this publication. Thanks!

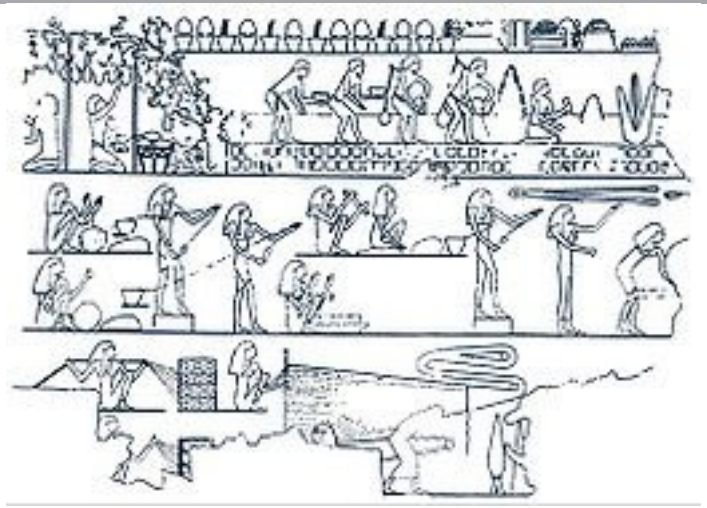
WEST YORKSHIRE BRANCH

Well, we did it! Nine different outings, displaying knotting and rope making. It was great fun, our members varied at each event with the whole year being enjoyable for us. We try our best to encourage new members and whilst there is a lot of interest shown I don't know if anybody has signed up as members yet. I can only record the events that I attended therefore to create a better picture, our next branch meeting (Nov 23rd) has the theme "Tell us what you have been doing." As a lot of our meeting attendees do not live in West Yorkshire, we want to find out what others have been doing with displays teaching knotting and ropework, to scouts, boat clubs, etc. I personally feel that we must take every opportunity to share our knowledge and skills with the public and hope that we can generate growth in our Guild.

David Pearson

Ancient Practice Continues Into The Present

Photograph of the Past



Making rope in Egypt, many years ago, from hieroglyphs

CUT FROM A LENGTH FOUND IN A CAVE
IN EGYPT EXCAVATED IN 1942. MADE
FROM NILE REEDS, AND CALCULATED TO
BE OVER 2000 YEARS OLD.
PRESENTED TO MR. G.C. HAWKINS.

Alaskan Branch
Every Thu. evening 6:00 to 8:00
Anchorage Senior Center
1300 E 19th Ave., Anchorage, AK
Contact Charles Rigden
Tel: (1) 928/231-4775

East Anglian Branch
Contact: Des Pawson
Tel: +44(0) 1473 690 090
e-mail: des@despawson.com

French Branch
Contact Jean-Pierre Durand
06 64 00 66 91
durand0547@orange.fr
www.igktfrance.com

German Branch
Contact: Andree Treffenfeld
Hermann-Lons Str 3C, D-24558
Henstedt-Ulzburg, Germany
Telephone: +49 (0) 172 4156789
Email: info@knotengilde.de

Midlands Branch
The Old Swan, Netherton
Contact: Bruce Turley
Tel: 0121 453 4124

Northwest Branch
Contact: Dave Walker
Tel: 01244 682 117

Netherlands
Every last Saturday (except Dec.)
De Hoop, Rotterdam
Contact: Frits Ottens
Tel: +31(0)587850011
Fruitstraat 58, 8933 GR Leeuwarden, Netherlands
E-mail: frits.efina@telfort.nl

NAB - Mid-Atlantic Region
Contact: Michael Pollock
See handbook for details

NAB - Knot in the Middle
Contact: Rusty Helms
See Handbook for details

Pacific Americas Branch
Second Tuesday of each month
At the Los Angeles Maritime Institute (upstairs)
San Pedro, California
Contact: Jimmy Williams
Tel: (1) 310/679-6864
e-mail: igktpab@gmail.com

Solent Branch
Second Tues. of even-number months
Fareham Sailing and Motor Boat Club
Fareham, Hants, UK
Contact: Ken Yalden
Tel: +44(0) 23 9225 9280

Surrey Branch
Meetings are held at Guildford District Scout Centre, Nightingale Road, Guildford, starting at 20:00 hrs. Please phone for more details
Contact: Howard Denyer
Tel: +44(0) 1483 536 401
www.surreyknots.org.uk

Sweden
Contact: Christoffer Åström
Tel: +46 736 381 731
E-mail: christoffer@knopar.se

West Country Knotters
Last Sat. of odd months @13:00 hrs
The Benjamin Perry Boathouse Activity and Training Centre
Phoenix Wharf, Lower Guinea Street, Bristol BS1 6TJ
Contact: Richard Hopkins for directions
Tel: 0117 986 7146
May be subject to change - call first

West Yorkshire Branch
Contact: David Pearson
Tel: 0113 257 2689

Back Cover - ***an interesting 'dog-bone' from John Richings in Barry, Glamorgan, Wales***